

Docket: 50N3272.02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Thomas Patrick Dawson
Application No.: 10/823,090
Date Filed: 04/12/2004
Title: SCANNING METHOD FOR APPLYING ULTRASONIC ACOUSTIC DATA
TO THE HUMAN NEURAL CORTEX
Group Art Unit: 3736
Examiner.: unassigned
Atty. Docket: 50N3272.02

INFORMATION DISCLOSURE STATEMENT (IDS)

Mail Stop Missing Parts
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SIR:

In accordance with 37 C.F.R. §1.56 and in compliance with 37 C.F.R. §§1.97 and 1.98, the references listed on attached Form PTO/SB/08 and/or subsequently identified herein, are being submitted herewith for consideration by the United States Patent and Trademark Office.

I. COPIES

- a. ☐ A legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed, is included herewith.
- b. ☒ Any patents, publications or other information which are listed on PTO/SB/08 which are not enclosed herewith were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. §120:

U.S. Serial Number
09/690,571
10/353,225

U.S. Filing Date
10/17/2000 (now U.S. 6,536,440)
01/28/2003 (now U.S. 6,729,337)

II. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

- a. ☒ Except as may be indicated below in (b) of this section, all of the patents, publications or other information are in the English language (concise explanation not required).
- b. ☐ A concise explanation of the relevance of all patents, publications or other information listed that is not in the English language is as follows:
- c. ☐ The following additional information is provided for the Examiner's consideration:

III. ☐ CROSS REFERENCE TO RELATED APPLICATION(S)

The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this (these) applications to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. §122.

Serial No.

Filing Date

Art Unit

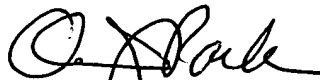
FEES

- IV. ☒ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(b): (check one box)
- a. ☐ within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. §1.97(b)(1)). No fee or statement is required.
 - b. ☐ within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. §1.97(b)(2)). No fee or statement is required.
 - c. ☒ before the mailing date of a first Office Action on the merits (37 C.F.R. §1.97(b)(3)). No fee or statement is required.
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- V. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(c): (check one box)
before the mailing date of any of a Final Office Action under 37 C.F.R. §1.113, a Notice of Allowance under 37 C.F.R. §1.311, or an action that otherwise closes prosecution in the application (See 37 C.F.R. §1.97(c)).
- a. ☐ No statement; therefore, charge deposit account 50-1047 the fee set forth in 37 C.F.R. §1.17(p).
 - b. ☐ See the statement below. No fee is required.
- VI. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(d):
on or before payment of the issue fee and is accompanied by the following:
- 1) a statement under 37 C.F.R. §1.97(e) as provided below; and
 - 2) charge deposit account 50-1047 the petition fee set forth in §1.17(p).
- VII. ☐ STATEMENT UNDER 37 C.F.R. §1.97(e) (check only one box, if applicable)
The undersigned hereby states that
- a. ☐ each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of IDS; or
 - b. ☐ no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and to knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement, or
 - c. ☐ some of the items of information contained in the IDS were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement.
- VIII. PAYMENT OF FEES
- ☐ A check in the amount of _____ is enclosed for the above-identified fee(s).
 - ☐ Please charge Deposit Account No. 50-1047 in the amount of \$180.00 for the above-indicated fee(s).
 - ☒ If Applicant has overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account 50-1047.
 - ☐ Two Copies of this paper are attached for Deposit Account charges and debits.

It is Applicant(s)' opinion that the claims presently on file patently distinguish the present invention from each of these references. The above references are being cited only in the interests of candor and without any admission that they constitute statutory prior art or contain matter which anticipates the invention or which would render the same obvious, either singly or in a combination, to a person of ordinary skill in the art.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 50-1047.

Respectfully submitted,



Keum J. Park
Attorney for Applicant(s)
Reg. No. 42,059

MAYER FORTKORT & WILLIAMS
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Enclosures:

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PTO/SB/08
References (excluding U.S. patent documents)
Foreign Search Report
Other:

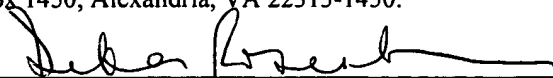
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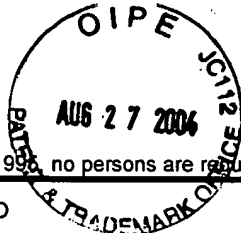
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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/823,090
				Filing Date	04/12/2004
				First Named Inventor	Thomas Patrick Dawson
				Group Art Unit	3736
				Examiner Name	unassigned
				Attorney Docket Number	50N3272.02
Sheet	1	of	3		

Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Class/Subclass		
	1	5159927	128/419R	Schmid	11-03-1992
	2	4628933	128/419R	Michelson	12-16-1986
	3	5109844	128/419R	DeJuan, Jr. et al.	05-05-1992
	4	5935155	607/54	Humayun et al.	08-10-1999
	5	5651365	128/622.03	Hanafy et al.	07-29-1997
	6	5956292	367/140	Bernstein	09-21-1999
	7	5971925	600/443	Hossack et al.	10-26-1999
	8	5179455	359/9	Garlick	01-12-1993
	9	4343301	128/24	Indech	08-10-1982
	10	3848608	128/419R	Leonard	11-19-1974
	11	4979508	128/419R	Beck	12-25-1990
	12	5031154	367/8	Watanabe	07-09-1991
	13	5097326	358/94	Meijer	03-17-1992
	14	4611596	128/419R	Wasserman	09-16-1986
	15	4883067	128/732	Knispel	11-28-1989
	16	5853370	600/473	Chance	12-29-1998
	17	4664117	128/897	Beck	05-12-1987
	18	6017302	600/28	Loos	01-25-2000
	19	5738625	128/897	Gluck	04-14-1998

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹²Unique citation designation number. ²Applicant is to place a check mark here if English language Translation is attached.

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Sheet 2 of 3	Attorney Docket Number	50N3272.02	

OTHER PRIOR ART—NON-PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	A1	MIHRAN, RICHARD T.; BARNES, FRANK S.; WACHTEL, HOWARD. "Transient Modification of Nerve Excitability in Vitro By Single Ultrasound Pulses". Department of Electrical and Computer Engineering, University of Colorado. 1990	
	A2	MIHRAN, RICHARD T.; BARNES, FRANK S.; WACHTEL, HOWARD. "Temporally-specific modification of myelinated axon excitability in vitro following a single ultrasound pulse". Ultrasound Med Biol Department of Electrical and Computer Engineering, Univ. of Colorado. 1990. pp. 297-309.	
	A3	MAYNARD, J.D.; WILLIAMS, E. G.; LEE, Y. "Nearfield acoustic holography: n I. Theory of generalized holography and the development of NAH	
	A4	STANLEY, GARRETT B.; LE, FEI F.; DAN, YANG. "Reconstruction of Natural Scenes from Ensemble Responses in the Lateral Geniculate Nucleus". Depart. Of Molecular and Cell Biology, Div. of Neurobiology, Univ. of Calif. The Journal of Neuroscience. 1999. pp. 8036-8042.	
	A5	ENSMINGER, DALE. Ultrasonics Fundamentals, Technology Applications. Columbus, Ohio. pp. 373-376.	
	A6	GAVRILOV, L. R.; GERSHUNI, G. V.; PUDOV, V. I.; ROZENBLYUM, A. S.; TSIRULNIKOV, E. M. "Human hearing in connection with the action of ultrasound in the megahertz range on the aural labyrinth". American Institute of Physics. Pp. 290-292.	
	A7	NORMAN, RICHARD A.; MAYNARD, EDWIN M.; GUILLORY, K. SHANE; WARREN, DAVID J. "Cortical Implants for the Blind". Cortical Implants for the Blind". The Institute of Electrical and Electronics Engineers, Inc. 1996.	
	A8	SCHWARTZ, ERIC L.; MERKER, BJORN; WOLFSON, ESTAROSE; SHAW, ALAN. "Applications of Computer Graphics and Image Processing to 2D and 3D Modeling of the Functional Architecture of Visual Cortex". Computational Neuroscience 13.	
	A9	LANGE, LARRY. "Treading fine line between man and machine, researchers pursue silicon prostheses – Chip implants: weird science with a noble purpose – Second of two parts". CMPnet. The Technology Network. February 10, 1997.	
	A10	MATSUMOTO, CRAIG. "Papers outline biochips to restore eyesight, movement". EETIMESonline. www.cmpnet.com . The Technology Network. 1999.	

Examiner Signature	Date Considered
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		Attorney Docket Number	50N3272.02
Sheet	3	of	3

A11	"Encoding of Binocular Disparity by Complex Cells in the Cat's Visual Cortex". JN Online. The Journal of Neurophysiology. Vol. 77. No. 6. 1997. pp. 2879-2909.	
A12	NORMANN, RICHARD A. http://www.bionictech.com . Center for Neural Interfaces.	
A13	WHITHOUSE, DAVID. Sci/Tech Computer uses cat's brain to see.	
A14	The Whitaker Center for Medical Ultrasonic Transducer Engineering. PennState College of Engineering. kksbio@engr.psu.edu.	
A15	Dpmi.tu-graz.ac.at/research/BCI; Brain Computer Interface.	
A16	lpaustralia.gov.au/fun/patents/02_ear.htm. Bionic Ear Patent. Melbourne University, Australian Patent 519851. filing date 1978.	
A17	WILLIAMS, EARL G. "Measurement and Projection of Acoustic Fields". Nava Research Laboratory, Code 5137, Washington DC 20375.	
A18	WALL, JUDY. "Resonance". Newsletter of the Bioelectromagnetics Special Interest Group. Pp. 11-13, 15-16.	

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